BEFORE

THE PUBLIC SERVICE COMMISSION OF

SOUTH CAROLINA

DOCKET NO. 2021-89-E
DOCKET NO. 2021-90-E

In the Matter of:	)	**JOINT PROPOSED ORDER OF DUKE ENERGY CAROLINAS, LLC, DUKE ENERGY PROGRESS, LLC, SOUTH CAROLINA OFFICE OF REGULATORY STAFF, CAROLINAS CLEAN ENERGY BUSINESS ASSOCIATION, SOUTHERN ALLIANCE FOR CLEAN ENERGY AND THE SOUTH CAROLINA COASTAL CONSERVATION LEAGUE**
Duke Energy Carolinas, LLC's and Duke Energy Progress LLC's 2021 Avoided Cost Proceeding Pursuant to S.C. Code Ann. Section 58-41-20(A)	)	

I. INTRODUCTION

This matter comes before the Public Service Commission of South Carolina (the "Commission") on the Joint Application of Duke Energy Carolinas, LLC ("DEC") and Duke Energy Progress, LLC ("DEP," together with DEC, the "Companies" or "Duke") for Approval of Standard Offer, Avoided Cost Methodologies, Form Contract Power Purchase Agreements, Commitment to Sell Forms, and Other Related Terms and Conditions filed April 22, 2021 (the "Joint Application"). The Joint Application requested Commission approval of the Companies:

(1) Continued application of the peaker methodology to calculate DEC's and DEP's avoided cost rates;

(2) Standard Offer, as defined in S.C. Code Ann. § 58-41-10(15), which includes the Companies' respective updated Schedule PP (SC) Purchased Power tariffs ("Standard Offer Tariff" or "Schedule PP"), Terms and Conditions for the Purchase of Electric Power ("Standard Offer Terms and Conditions" or "Terms and Conditions"), and Standard Offer power purchase agreement ("Standard Offer PPA") available to all qualifying cogenerators and small power production facilities ("QFs") up to 2 megawatts ("MW") in size;

(3) Power purchase agreement available to small power producer QFs that are not eligible for the Standard Offer ("Large QF PPA") and the Companies' respective updated Schedule PP-LQF (SC) Purchased Power tariffs available to small power producer QFs that are not eligible for the Standard Offer ("Large QF Tariff"); and

(4) Notice of commitment to sell form ("Notice of Commitment Form").

The Joint Application was filed in Docket Nos. 2021-89-E and 2021-90-E pursuant to S.C. Code Ann. § 58-41-20(A) and Commission Order No. 2021-257. In these proceedings, DEC and DEP are seeking Commission approval of each of the above-listed documents as specifically required by S.C. Code Ann. § 58-41-20 of the South Carolina Energy Freedom Act ("Act 62" or the "Act").

A. <u>Procedural History</u>

The Companies' most recently approved avoided cost rates and Standard Offer Tariffs, which became effective November 30, 2018, were approved by the Commission in Docket Nos.

2019-185-E and 2019-186-E by Order No. 2019-881(A), as modified on reconsideration by Order No. 2020-315(A).

On April 22, 2021, the Companies filed their Joint Application. On May 17, 2021, the Companies filed the direct testimony and exhibits of Glen A. Snider, Director of Carolinas Integrated Resource Planning and Analytics, and David B. Johnson, Director of Business Development and Compliance for Duke Energy.[1] The Commission granted confidential treatment of Snider DEC Exhibit 1 and Snider DEP Exhibit 1 in Order No. 2021-71-H. The Companies' Joint Application and pre-filed testimony requested approval of: (1) the continued application of the peaker methodology to calculate avoided cost rates; (2) the Companies' updated Standard Offer (including Schedule PP, Terms and Conditions, and Standard Offer PPA); (3) the Companies' updated Large QF PPA; and (4) the Companies' updated Notice of Commitment Form.

By letter dated May 4, 2021, the Clerk's Office of the Commission transmitted the Notice of Filing and Hearing and Prefile Testimony Deadlines ("Notice")[2] in the above-referenced dockets to DEC and DEP. The Notice indicated the nature of the proceeding and advised all parties desiring participation in the scheduled proceeding of the manner and time by which to file appropriate pleadings. On June 11, 2021, the Companies filed affidavits demonstrating that the Notice was duly published and furnished to small power producers in accordance with the instructions set forth in the May 4, 2021 letter.

Petitions to Intervene were received from Carolinas Clean Energy Business Association ("CCEBA"); South Carolina Coastal Conservation League ("CCL"); Southern Alliance for Clean Energy ("SACE"); Johnson Development Associates, Inc. ("JDA"); Pelzer Hydro Company, LLC

[1] On June 16, 2021, the Companies filed Johnson Amended DEC/DEP Exhibit 9 to correct illegible information.
[2] The Commission subsequently issued a Revised Notice on June 16, 2021, confirming the evidentiary hearing would be conducted virtually.

("Pelzer"); Aquenergy Systems, LLC ("Aquenergy"); and Northbrook Carolina Hydro, LLC ("Northbrook"). The South Carolina Department of Consumer Affairs ("SCDCA") was notified of this proceeding pursuant to S.C. Code Ann. § 37-6-604(C) and submitted a petition to intervene. The Petitions to Intervene of CCEBA, CCL, SACE, JDA, Pelzer, Aquenergy, Northbrook, and SCDCA were not opposed by the Companies, and were granted by various Orders of the Commission.[3] No other parties sought to intervene in this proceeding. The Office of Regulatory Staff ("ORS") is automatically a party to this docket by virtue of S.C. Code Ann. § 58-4-10(B) (2015).

Pursuant to S.C. Code Ann. § 58-41-20(I) the Commission selected London Economics International LLC ("London Economics") as the independent third-party consultant to advise and report to the Commission on the Companies' avoided costs. In Order No. 2021-520, the Commission set forth the scope of work for London Economics. On August 23, 2021, London Economics provided its Independent Report on Duke Energy Carolinas, LLC and Duke Energy Progress, LLC's 2021 Avoided Cost Proceeding (the "London Economics Report" or the "Report") to the Commission and Parties.[4] Pursuant to Commission Orders 2021-520 and 2021-527, the Parties were provided the opportunity to conduct discovery on London Economics as well as prefile responsive testimony and/or exhibits to the London Economics Report. None of the Parties filed responsive testimony to the London Economics Report.

On May 26, 2021, the Commission issued Order No. 2021-386(A) consolidating the DEC and DEP dockets for hearing.

[3] On July 23, 2021, Pelzer, Aquenergy, and Northbrook requested to withdraw their petition to intervene. This request was subsequently granted by Order No. 2021-522.
[4] Hearing Exhibit 7.

On June 11, 2021, ORS filed the direct testimony of Gretchen C. Pool, Regulatory Analyst of Energy Efficiency and Renewables in the Utility Rates and Services Division of ORS, and Brian Horii, Senior Partner with Energy and Environmental Economics, Inc. ("E3"). Exhibits were included with the direct testimony of ORS Witness Horii.

On July 23, 2021, the Companies filed the stipulation testimony of DEC/DEP Witness Snider and the stipulation testimony and exhibits of DEC/DEP Witness Johnson. Also on July 23, 2021, the Companies, ORS, CCEBA, SACE, and CCL (collectively, the "Stipulating Parties") filed a Stipulation of Agreement ("Stipulation") resolving all outstanding issues. As part of the Stipulation, the Parties agreed to stipulate into the record the pre-filed direct and stipulation testimony and exhibits of DEC/DEP Witnesses Snider and Johnson, and the pre-filed direct testimony and exhibits of ORS Witness Horii and the pre-filed direct testimony of ORS Witness Pool without objection or cross-examination by the Stipulating Parties.

The Commission convened a virtual evidentiary hearing on this matter on August 2, 2021 with the Honorable Justin T. Williams presiding.

The Companies were represented by Frank R. Ellerbe, III, Esquire, and E. Brett Breitschwerdt, Esquire[5]. ORS was represented by Andrew M. Bateman, Esquire, and Benjamin P. Mustian, Esquire. SCDCA was represented by Roger P. Hall, Esquire. CCEBA was represented by Richard L. Whitt, Esquire. SACE and CCL were represented by Katherine Lee Mixson, Esquire, and Emma C. Clancy, Esquire. JDA was represented by Weston Adams, III, Esquire, and Courtney E. Walsh, Esquire.

DEC/DEP Witness Snider appeared first for the Companies. Witness Snider gave a summary of his direct and stipulation testimony and answered questions from the Commission.

[5] Mr. Breitschwerdt was granted admission *pro hac vice* in Order No. 2021-486.

Witness Snider provided testimony in support of the Companies' use of the peaker methodology for the calculation of avoided cost and in support of an adjustment to DEC's seasonal allocation of capacity value as presented by ORS Witness Horii and as agreed to in the Stipulation. Next, DEC/DEP Witness Johnson gave a summary of his direct and stipulation testimony and answered questions from the Commission. Witness Johnson provided testimony in support of the non-rate terms and conditions of the Companies' documents used for contracting with QFs under Act 62.

Subsequently, ORS Witnesses Pool and Horii appeared and gave summaries of their direct testimonies and answered questions from the Commission. Witness Pool provided the results of ORS's examination of DEC and DEP's compliance with certain sections of Act 62 and supported the recommendations resulting from ORS's review of the Companies' filings in this docket. Witness Horii discussed the analyses, review, and recommendations regarding the Companies' standard offers, avoided cost methodologies, form power purchase agreements, and commitment to sell forms. Witness Horii also discussed the consistency of the avoided cost methodology with PURPA requirements and the reasonableness of the avoided energy and capacity cost rates requested by the Companies.

The Commission reconvened the hearing on September 16, 2021, at which time London Economics' President Jonathan Arthur Goulding gave a summary of the London Economics Report, which included recommending the Stipulation be approved, and answered questions from the Commission.

II. SUMMARY OF COMMISSION DECISION

The instant proceedings mark DEC's and DEP's second Joint Application for approval of their respective avoided costs calculation methodology, rates, and related contracting documents under Act 62. In approving the Companies' first application for approval of the avoided costs documents under Act 62 in 2019, the Commission resolved a number of contested issues after a well-vetted proceeding that involved extensive testimony and evidence from the Companies, ORS, and many intervenors.

The contracting documents as well as the methodology the Companies used to calculate their avoided capacity and avoided energy rates in this proceeding, as agreed to in the Stipulation, align closely with the documents and methodology approved by the Commission in Order 2019-881(A). The documents presented by the Stipulating Parties for the Commission's consideration contain only limited revisions from the 2019 documents. In addition, the Companies, ORS, CCEBA, SACE, and CCL have entered into a Stipulation, recommending jointly that the Commission approve the Companies' avoided cost rates and methodology, Standard Offer Tariff, Standard Offer PPA, Standard Offer Terms and Conditions, Large QF PPA, Large QF Tariff, and Notice of Commitment Form as agreed to in the Stipulation.[6] The other parties to the proceeding, SCDCA and JDA, do not oppose the Stipulating Parties' proposed resolution of the issues in this proceeding, as presented in the Stipulation.

In addition to consensus among the parties, the Commission's independent third-party consultant, London Economics, recommended that the Commission approve the Companies' avoided cost rates, Standard Offer and other contracting documents as presented in the Stipulation. Following a thorough review of the record, London Economics found that the Companies' proposed Standard Offer and Large QF Tariffs accurately reflect DEC's and DEP's avoided costs, and that the contractual terms of the Standard Offer PPAs, Standard Offer Terms and Conditions, Large QF PPA, and Notice of Commitment Forms are commercially reasonable and consistent with PURPA and meet the requirements of Act 62.

[6] The Parties to the Stipulation each reserve their respective rights to advocate for differing positions in future proceedings.

Taking into consideration all of the evidence in the record and as set forth in more detail in this Order, the Commission is persuaded that the Companies' avoided cost methodology used to calculate their respective avoided capacity and avoided energy costs, Standard Offer documents, Large QF Tariffs, Large QF PPA, and Notice of Commitment Forms as presented in the Stipulation are reasonable and comply with the requirements of Act 62, PURPA, and FERC's implementing regulations. Moreover, the Commission commends the parties for their efforts to resolve the complex issues presented in these proceedings in a cooperative, efficient manner. The Commission recognizes the participation of diverse stakeholders in the Stipulation, and finds that the Stipulation reflects a balanced resolution of the issues presented in this proceeding that is consistent with PURPA, just and reasonable to DEC's and DEP's ratepayers, in the public interest, and nondiscriminatory to small power producers.

III. GUIDING LEGAL FRAMEWORK: PURPA AND ACT 62

A. <u>Jurisdiction</u>

This Commission has jurisdiction over the Companies' Joint Application, as the Companies are electrical utilities under the laws of South Carolina and their operations are subject to the jurisdiction of this Commission. The Companies are also subject to Act 62, which, in pertinent part, requires the Commission to conduct biennial proceedings to oversee South Carolina's electrical utilities' compliance with the federal PURPA law, including review and approval of the Companies' avoided cost methodologies and rates, Standard Offer, form PPAs for QFs not eligible for the Standard Offer, as well as standard notice of commitment to sell forms available to all small power producer QFs as part of the State's PURPA implementation framework. S.C. Code Ann. § 58-41-20(A). Accordingly, the Companies' Joint Application seeks Commission approval of DEC's and DEP's avoided cost methodologies and rates, Standard Offer tariffs, form contract power purchase agreements, commitment to sell forms, and other related terms and conditions as required by Act 62.

B. **PURPA Framework and Mandatory Purchase Requirements**

Pursuant to Sections 201 and 210 of PURPA, electric utilities like DEC and DEP are required to interconnect with and to offer to purchase electric energy from qualifying cogeneration and small power production facilities or "QFs." *See* 16 U.S.C. § 824a-3(a). This is known as the "mandatory purchase obligation" under PURPA. *See generally Implementation Issues Under the Public Utility Regulatory Policies Act of 1978*, 168 FERC ¶ 61,184 at ¶76 (Sept. 19, 2019) ("PURPA NOPR") (noting that PURPA's mandatory purchase requirements are a benefit of QF certification). PURPA requires the rates that electrical utilities pay to purchase QF energy shall not exceed the purchasing electrical utility's "avoided costs," which PURPA defines as the incremental cost to the electric utility of the electric energy, which, but for the purchase from such QFs, such utility would generate or purchase from another source. *See* 16 U.S.C. § 824a-3(b), (d). PURPA also requires that the rates for purchases of QF power be set at levels and in a manner that is just and reasonable to the utility's customers, in the public interest, and nondiscriminatory towards QFs. *See* 16 U.S.C. § 824a-3(b)(l); (2).

In enacting PURPA, Congress directed FERC to prescribe regulations to encourage the development of cogeneration and small power production facilities under PURPA and delegated to state commissions the responsibility of implementing FERC's regulations, including PURPA's mandatory purchase obligation. *See* 16 U.S.C. § 824a-3(f); *see also FERC v. Mississippi*, 456 U.S. 742,750-51, 102 S.Ct. 2126 (1982). In 1980, FERC issued its rulemaking order, Order No. 69, establishing regulations to implement PURPA. *See Final Rule Regarding the Implementation of Section 210 of the Public Utility Regulatory Policies Act of 1978*, Order No. 69, FERC Stats. & Regs. ¶ 30,128, (1980) ("Order No. 69"). In 2020, FERC issued Order No. 872, updating the avoided cost rate provisions of its regulations to ensure that its implementing regulations continue to meet the requirements of sections 201 and 210 of PURPA to both encourage QFs while protecting electric consumers. *See Qualifying Facility Rates and Requirements Implementation Issues Under the Public Utility Regulatory Policies Act of 1978*, Order No. 872, 172 FERC ¶ 61,041, *clarified by* Order No. 872-A, 173 FERC ¶ 61,158 (2020) ("Order No. 872").

The Companies' Joint Application states that DEC and DEP are continuing to evaluate how and/or whether to incorporate the new options available under Order No. 872, in light of Act 62's prescriptive requirements for PURPA implementation in South Carolina and may propose changes in accordance with Order No. 872 in future PURPA-related proceedings. (Tr. Vol. 1 at 40.13.) No party has suggested that the Companies' proposed PURPA rates and terms, as agreed to in the Stipulation, are inconsistent with any aspect of FERC's updated regulations in Order No. 872, and the Commission similarly finds that the Companies have reasonably complied with PURPA and FERC's implementing regulations for purposes of this proceeding.

C. Act 62 Requirements

Act 62 prescribes a biennial review and approval process for the Commission to administer PURPA implementation in South Carolina and sets a specific procedural framework through which the Commission must consider these issues. Also, while the Commission's previous review of the Companies' PURPA implementation has been specific to each electrical utility's standard offer, Act 62 expressly requires the Commission to review and approve form PPAs for QFs not eligible for the Standard Offer as well as standard notice of commitment to sell forms available to all small power producer QFs as part of the State's PURPA implementation framework. *See* S.C. Code Ann. § 58-41-20(A), (C), (D).

Importantly, Act 62 does not modify the foundational requirements of PURPA and defines "avoided cost" consistently with FERC's implementing regulations. *See* S.C. Code Ann. § 58-41-

20(A); *c.f.* 18 C.F.R. § 292.304(A). In fact, Act 62 mandates that South Carolina's PURPA implementation must be "consistent with PURPA and the Federal Energy Regulatory Commission's implementing regulations and orders," and expressly requires the Commission's determination of the rates for purchase from QFs to be "just and reasonable to the ratepayers of the electrical utility, in the public interest . . . and nondiscriminatory to small power producers." *See generally* S.C. Code Ann. § 58-41-20(A). In addition, Act 62 further prescribes that the Commission's implementation of PURPA in South Carolina "shall strive to reduce the risk placed on the using and consuming public." *Id.* The risk of PURPA implementation exists for electrical utility customers, in part, because customers are responsible for paying the cost of all power purchased from QFs through the annual fuel factor. *See* S.C. Code Ann. § 58-27-865.

Act 62 also prescribes that the Commission shall:

> [T]reat small power producers on a fair and equal footing with electrical utility owned resources by ensuring that:
>
> (1) rates for the purchase of energy and capacity fully and accurately reflect the electrical utility's avoided costs;
>
> (2) power purchase agreements, including terms and conditions, are commercially reasonable and consistent with regulations and orders promulgated by the Federal Energy Regulatory Commission implementing PURPA; and
>
> (3) each electrical utility's avoided cost methodology fairly accounts for costs avoided by the electrical utility or incurred by the electrical utility, including, but not limited to, energy, capacity, and ancillary services provided by or consumed by small power producers including those utilizing energy storage equipment. Avoided cost methodologies approved by the commission may account for differences in costs avoided based on the geographic location and resource type of a small power producer's qualifying small power production facility.

S.C. Code Ann. § 58-41-20(B). For larger QFs not eligible for the Standard Offer, the avoided cost rates offered by an electrical utility to a small power producer not eligible for the standard offer must be calculated based on the avoided cost methodology most recently approved by the commission. S.C. Code Ann. § 58-41-20(C).

Act 62 further prescribes certain express requirements for purchased power agreements ("PPA") offered by electrical utilities to small power producers, as well as requirements to be included in notice of commitment forms, each of which is further addressed in this Order. S.C. Code Ann. § 58-41-20(D)-(E).

In sum, Act 62 directs the Commission to review each South Carolina electric utility's avoided cost rates and PURPA implementation every two years beginning six months from the Act's effective date, specifically including approving the utility's Standard Offer, avoided cost methodologies, form contract power purchase agreements, commitment to sell forms, and any other terms or conditions necessary to implement the mandatory purchase requirements of PURPA. Applying the requirements of Act 62, consistent with PURPA and FERC's implementing regulations, the Commission finds as follows:

IV. FINDINGS OF FACT

A. Peaker Methodology

1. The peaker methodology as proposed by DEC and DEP and agreed to in the Stipulation continues to be a reasonable and appropriate methodology to fully and accurately quantify DEC's and DEP's forecasted capacity and energy cost to be avoided by purchases from QFs.

B. Avoided Capacity Quantification and Rate Design

2. DEC and DEP have appropriately identified their first avoidable capacity need, as presented in the utilities' 2020 Integrated Resource Plans ("IRP") and as agreed to in the Stipulation.

3. In applying the peaker methodology, Duke has used reasonable "peaker" cost assumptions published by the United States Energy Information Administration ("EIA") for the cost of the avoided combustion turbine unit used to quantify the projected capacity value avoided by QF purchases.

4. The performance adjustment factor capacity payment multipliers of 1.07 for DEC and 1.08 for DEP are reasonable and support Act 62's objective of placing QF generators and utility generators on equal footing in terms of reasonable allowance for unplanned outages.

5. The seasonal allocation weightings of 95% for winter and 5% for summer for DEC, and 100% for winter for DEP, as agreed to in the Stipulation, should be used in calculating DEC's and DEP's avoided capacity rates in this proceeding.

C. Avoided Energy Cost Quantification and Rate Design

6. Duke's modeling methodology and input assumptions used to calculate DEC's and DEP's avoided energy cost rates as agreed to in the Stipulation are reasonable.

7. DEC and DEP have accurately quantified their avoided energy costs for purposes of this proceeding.

8. DEC's and DEP's proposed avoided energy rate design as agreed to in the Stipulation ensures that avoided cost rates accurately compensate QFs for the value of the energy they provide to the Companies and customers, consistent with PURPA, FERC's implementing regulations, and Act 62.

D. Solar Integration Services Charge

9. DEC and DEP are incurring increased intra-hour ancillary services cost to integrate variable and intermittent solar generators. It is appropriate to recover these costs from the solar generators that are causing the cost through the Solar Integration Services Charge ("SISC"). Continuation of the SISC of $1.10/MWh for DEC and $2.39/MWh for DEP as agreed to in the

Stipulation, are reasonable and should be approved. DEC and DEP should file update SISCs with the Commission in 2022 after completing the independent technical review as agreed to in the Stipulation.

E. Standard Offer Documents: Tariffs, PPAs, and Terms and Conditions

10. The Standard Offer Tariff, Standard Offer PPA and Standard Offer Terms and Conditions, as agreed to in the Stipulation, are commercially reasonable and should be approved for small power producer QFs up to 2 MW.

F. Large QF PPA

11. The Large QF PPA, as modified and agreed to in the Stipulation, is commercially reasonable and should be the approved form of PPA for small power producer QFs larger than 2 MW that do not qualify for the Standard Offer ("Large QFs").

G. Large QF Tariffs

12. The Large QF Tariffs, as agreed to in the Stipulation, are commercially reasonable, compliant with Order No. 2020-315(A), and should be approved for Large QFs. DEC and DEP should continue to update on a quarterly basis their respective Large QF Tariff avoided cost rates using the most up-to-date inputs under the approved peaker methodology and file those Large QF Tariff updates with the Commission.

H. Notice of Commitment Form

13. The Notice of Commitment Form proposed by Duke is reasonable and ensures that QFs make a substantial and binding commitment to sell their output to the Companies when establishing a non-contractual legally enforceable obligation.

V. EVIDENCE AND CONCLUSIONS

A. Peaker Methodology

EVIDENCE AND CONCLUSIONS SUPPORTING FINDINGS OF FACT NO. 1

The evidence supporting these findings of fact is contained in the Companies' Joint Application, testimony, and exhibits in these Dockets, the Stipulation, and the entire record in this proceeding.

DEC/DEP Witness Glen Snider advocated for Commission approval of the Companies' continued use of the "peaker methodology" to forecast and quantify the Companies' avoided capacity and energy costs. (Tr. Vol. 1, p. 40.13.) He explained that the peaker methodology assumes that when a utility's generating system is operating at equilibrium, the installed fixed capacity cost of a simple-cycle combustion turbine ("CT") generating unit (a "peaker") plus the variable marginal energy cost of running the system will produce a reasonable proxy for the marginal capacity and energy costs that a utility avoids by purchasing power from a QF. (Tr. Vol. 40.14.) Using this methodology, Witness Snider explained, the peaker methodology ensures, consistent with PURPA, that capacity purchases from new QF generators are not more expensive than the avoided capacity cost of a peaker. (Tr. Vol. 1, p. 40.14.)

Witness Snider testified that the peaker methodology is a widely used and accepted industry approach to quantifying avoided cost rates paid to QFs. (Tr. Vol. 1, p. 36.) He noted that the National Association of Regulatory Utility Commissioners ("NARUC") has recognized the peaker methodology as one of the dominant methodologies for measuring avoided cost under PURPA and that this Commission has consistently accepted the Companies' use of the peaker methodology to quantify DEC's and DEP's forecasted avoided capacity and energy costs. (Tr. Vol. 1, p 40.16.) According to Mr. Snider, the peaker methodology provides an appropriate and reasonable estimate of the avoided or incremental costs of alternate capacity and energy that would have otherwise been incurred but for the purchase from a QF facility, thus leaving the consumer indifferent to the utility's purchase of QF generation. (Tr. Vol. 1, pp. 36, 40.10.)

ORS Witness Brian Horii supported the Companies' use of the peaker methodology to calculate their respective avoided costs. (Tr. Vol. 1, p. 106.6.) He noted that the peaker methodology is a "generally accepted" method for calculating PURPA avoided energy and capacity costs and that the Commission approved the Companies' use of the methodology in Order No. 2019-881(A). (Tr. Vol. 1, p. 106.6.) No other intervenor proffered testimony regarding the Companies use of the peaker methodology. As Witness Snider explained, however, the Stipulating Parties support Commission approval of the Companies' avoided cost methodology as reflected in the Stipulation. (Tr. Vol. 1, p. 44.3.)

The Commission's independent third-party consultant, London Economics, likewise accepted the Companies' continued use of the peaker methodology and acknowledged that it is "commonly used by utilities throughout the country." (Hrg. Ex. 7, at 12, 50.) London Economics Witness Goulding testified that the Companies' proposed avoided cost methodology as agreed to in the Stipulation "fairly accounts for DEC's and DEP's avoided costs." (Tr. Vol. 2, pp. 9-10.) Witness Goulding noted that the methodology has been approved by the Commission and in the Companies' 2019 avoided cost proceeding and that it is "broadly applied across the industry in similar proceedings." (Tr. Vol. 2, p. 10.) For these reasons, London Economics recommends that the Commission approve the Companies' continued use of the peaker methodology to calculate DEC's and DEP's avoided costs. (Tr. Vol. 2, p. 10.)

<u>Commission Conclusions</u>

Act 62 directs the Commission to review and approve the methodology that the Companies use to establish avoided energy and capacity cost rates offered to QFs—including both smaller

QFs eligible for the Standard Offer as well as Large QFs—to ensure that the utility fully, accurately, and fairly accounts for costs avoided or incurred by the Companies, "including, but not limited to, energy, capacity, and ancillary services provided by or consumed by small power producers[.]" *See* S.C. Code Ann. §§ 58-41-20(A), 48-41-20(B)(1), (3).

Taking into consideration the evidence presented, the general agreement among the parties and the findings of the London Economics Report, the Commission finds that the Companies' application of the peaker methodology is reasonable and appropriate for purposes of fully and accurately quantifying DEC's and DEP's forecasted capacity and energy cost to be avoided by purchases from QFs and is consistent with the requirements of Act 62 and PURPA.

B. <u>Avoided Capacity Quantification and Rate Design</u>

EVIDENCE AND CONCLUSIONS SUPPORTING FINDINGS OF FACT NOS. 2-5

The evidence supporting these findings of fact is contained in the Companies' Joint Application, testimony, and exhibits in these Dockets, the Stipulation, and the entire record in this proceeding.

Witness Snider explained that the peaker methodology calculates avoidable marginal capacity by examining the annual fixed cost associated with constructing, financing, and operating a simple cycle combustion turbine ("CT") generating unit (a "peaker"). (Tr. Vol. 1, p. 37.) According to Witness Snider, the Companies used data from EIA as the basis for developing the CT capital cost. Because the EIA data reflects the cost to build a single CT unit at a greenfield site, the Companies' adjusted the EIA data to reflect their practice of building multiple units at each new site. (Tr. Vol. 1, p. 40.18.)

Recognizing that the utility's avoided fleet resources are occasionally unavailable, the Companies increase the calculated capacity value pursuant to a performance adjustment factor ("PAF") to ensure that the QF is not penalized for experiencing the same level of unavailability typically experienced by the resources it is displacing. (Tr. Vol. 1., p. 40.19.) Witness Snider explained that the Companies included a 1.07 PAF for DEC and 1.08 for DEP in the avoided capacity calculations to ensure that QFs are treated on fair and equal footing with utility-owned resources. (Tr. Vol. 1, p. 40.19.)

In addition, Witness Snider explained, the Companies avoided capacity calculation takes into account the utility's actual need for capacity based on customer demand. (Tr. Vol. 1, p. 37.) Witness Snider explained that, under PURPA, customers should not be required to pay QFs for avoided capacity unless the QF is actually offsetting a capacity need of the utility. (Tr. Vol. 1, p. 40.19.) Accordingly, the annual fixed capacity costs used in the avoided cost rate calculation includes the annual fixed capacity costs starting with the first year in which an actual avoidable capacity need exists, as determined by the utilities' IRPs. (Tr. Vol. 1, p. 40.19.) Prior to the year in which the next avoidable generation unit is needed, the utility does not have a capacity need to avoid, and therefore in the calculation of the capacity rate, no value for avoided capacity is ascribed in these years. Witness Snider explained that if this was not accounted for, customers would be paying a QF for marginal capacity that is providing no actual benefit to serve their needs for capacity. (Tr. Vol. 1, p. 40.20.) Witness Snider testified that, as described in detail in Chapter 13 of the Companies' respective September 1, 2020 IRPs, filed in Docket Nos. 2019-224-E and 2019-225-E ("2020 IRPs"), DEC's projection of its first avoidable capacity need arises in 2026, while DEP's first avoidable capacity need is 2024. (Tr. Vol. 1, p. 40.20.) DEC's first year of need (2026) is the same first year of need as identified in the 2019 avoided cost proceeding. Witness Snider explained that this results in an increase to the avoided capacity rates relative to the 2019 proposed avoided capacity rates given that there are two additional years with an ascribed capacity value in the 10-year prospective period captured by the rates. (Tr. Vol. 1, p. 40.21.) Conversely, DEP's identified first year of need (2024) arises four years later than the first year of need identified in the 2019 avoided cost proceeding, which results in a decrease to the avoided capacity rates relative to the 2019 proposed avoided cost rates. (Tr. Vol. 1, p. 40.21.) Regardless of first year of need, avoided capacity payments are levelized over the rate term to allow the QF to receive an avoided capacity payment in each year of the contract. (Tr. Vol. 1, p. 40.21.) Witness Snider testified that the Companies' incorporation of DEC's and DEP's first year of capacity need into their respected avoided capacity rate calculations is fair to customers and fair and non-discriminatory to QFs. (Tr. Vol. 1, p. 40.21.)

Next, Witness Snider explained that the Companies incorporate seasonal allocation weighting to determine the avoided capacity payments. (Tr. Vol. 1, p. 40.22.) For DEC and DEP, seasonal allocation is heavily weighted to winter based on the impact of summer versus winter loss of load risk, which has been driven by the volatility in winter peak demand, as well as the growing penetration of solar resources and its associated impact on summer versus winter reserves. (Tr. Vol. 1, p. 40.22.) Witness Snider stated that the Companies developed the seasonal allocation factors, consistent with Order No. 2019-881(A), based on total connected solar generating facilities plus solar facilities with signed PPAs as determined by the Companies' 2018 Solar Capacity Value Study. (Tr. Vol. 1, pp. 40.22, 42.) Using this analysis, DEP's avoided capacity rates pay 100% of the annual capacity value in the winter, while DEC's avoided capacity rates pay 89% in the winter and 11% in the summer period. (Tr. Vol. 1, p. 40.22.) ORS Witness Horii found that the allocation of 0% capacity cost to the summer season for DEP was reasonable, but recommended, along with ORS Witness Pool, that DEC adjust its seasonal allocation weighting to reflect a 5% summer allocation and 95% winter allocation. (Tr. Vol. 1, p. 105.11.) According to Witness Horii, this allocation adjustment better reflects DEC's need for capacity in the summer. (Tr. Vol. 1, p.

105.11.) Witness Snider explained that, as part of the Stipulation, the Stipulating Parties agreed to Witness Horii's recommended seasonal allocation adjustment for calculating DEC's avoided capacity costs in this proceeding. (Tr. Vol. 1, pp. 42, 44.4.)

Overall, ORS Witnesses Horii and Pool found the Companies' estimates of generation capacity cost to be reasonable and consistent with the methodology adopted by the Commission in Order No. 2019-881(A). Witness Horii also specifically found that the updates incorporated into the Companies' inputs were reasonable. (Tr. Vol. 1, p. 105.11.) No other intervenor proffered testimony on the Companies' avoided capacity quantification and rate design. As Witness Snider explained, however, the Stipulating Parties have agreed to support Commission approval of the Companies' avoided capacity rates with the modification to the seasonal allocation of capacity value presented by ORS Witness Horii. (Tr. Vol. 1, p. 44.3.)

On behalf of the Commission's independent third-party consultant, London Economics Witness Goulding testified that the Companies' avoided cost methodology, including its avoided capacity calculation and as agreed to in the Stipulation, "fairly accounts for DEC's and DEP's avoided costs" and advocated that the Commission approve the methodology and avoided capacity rates. (Tr. Vol. 2, p. 10.) More specifically, in its Report, London Economics stated that it was appropriate for the Companies to base the first year of capacity needs on the Companies' respective IRPs. London Economics also agreed with the Companies' use of EIA data to quantity the projected capacity value avoided by QF units and found the Companies' assumptions regarding the PAF to be reasonable. (Hrg. Ex. 7, at 32-33.) Witness Goulding additionally noted that London Economics agrees with the stipulated modification to DEC's seasonal allocation as proposed by ORS Witness Horii and adopted by the Stipulating Parties as part of the Stipulation. (Tr. Vol. 2,

p. 10.) According to Witness Goulding, the seasonal allocation modification "ensures that capacity costs are allocated in a way that better reflects expected system needs." (Tr. Vol. 2, p. 10.)

Commission Conclusions

As part of the Commission's responsibility under Act 62 to approve the Companies' avoided cost methodology, the Commission must also ensure that "rates for the purchase of energy and capacity fully and accurately reflect the electrical utility's avoided costs" including the utility's capacity costs to be avoided by purchases from QFs. S.C. Code Ann. § 58-41-20(B)(1), (3).

Taking into consideration the evidence presented, the general agreement among the parties and the Commission's independent third-party consultant, the Commission finds that the Companies' avoided capacity quantification and rate design, as agreed to in the Stipulation, accurately reflects their respective avoided capacity costs such that the rates are fair to the Companies' customers and fair and non-discriminatory to QFs. Consistent with this evidence, the Commission finds that (1) the Companies appropriately identified their first avoidable capacity need as presented in their respective 2020 IRPs; (2) it was reasonable for the Companies to use EIA data as the basis for their "peaker" cost assumptions to quantify the projected capacity value avoided by QF purchases; (3) the PAF multipliers of 1.07 for DEC and 1.08 for DEP are reasonable and support Act 62's objective of placing QF generators and utility generators on equal footing in terms of unplanned outages; and (4) the seasonal allocation weightings of 95% (winter) and 5% (summer) for DEC and 100% (winter) for DEP are reasonable for use in calculating the Companies' respective avoided capacity rates.

In addition to meeting the requirements of Act 62, the Commission appreciates that the avoided capacity quantification and rate design were accepted by a diverse group of stakeholders. The Commission agrees with London Economics that the participation of organizations representing the public interest, interests of developers, and interest of the utilities suggests that the approach and corresponding rates are balanced. (Hrg. Ex. 7, at 50.) Accordingly, the Commission hereby finds that the avoided capacity quantification and rate design, as agreed to in the Stipulation, is a reasonable and appropriate methodology to fully and accurately quantify DEC's and DEP's forecasted capacity and energy cost to be avoided by purchases from QFs and is consistent with the requirements of Act 62 and PURPA.

C. Avoided Energy Cost Quantification and Rate Design

EVIDENCE AND CONCLUSIONS SUPPORTING FINDINGS OF FACT NO. 6-8

The evidence supporting these findings of fact is contained in the Companies' Joint Application, testimony, and exhibits in these Dockets, the Stipulation, and the entire record in this proceeding.

Witness Snider explained that the Companies calculate their respective avoided marginal energy rates using two production cost model simulations which are compared to each other to determine the value of QF energy. (Tr. Vol. 1, p. 40.24.) According to Witness Snider, a production cost model simulates the generation commitment and dispatch of the utility's fleet of generating resources needed to meet the utility's load over the ten-year avoided cost period on an hour-to-hour basis. (Tr. Vol. 1, p. 40.24.) The first simulation uses the IRP production cost model and current market assumptions to establish the "base case" of the estimated variable production costs over the period. (Tr. Vol. 1, p. 40.24.) The second simulation is identical to the first but adds a hypothetical 100 MW of no-cost generation to the utility's generating fleet, which is available to the system in every hour of the ten-year period. (Tr. Vol. 1, p. 40.24.) Witness Snider explained that comparing the hourly production cost associated with the base case relative to the second case with the 100 MW of no-cost generation determines the marginal hourly energy costs that can be avoided over the study period. (Tr. Vol. 1, p. 40.24.) According to Witness Snider, these marginal avoided costs are then used to calculate the avoided energy rates that leave a customer indifferent between QF purchases and generation provided by the utility. (Tr. Vol. 1, p. 40.24.)

Witness Snider further explained that the marginal energy rate structure differentiates between Summer (June–September), Winter (December–February), and Shoulder (March–May, October–November) seasons. (Tr. Vol. 1, p. 40.26.) The Companies adopted minor adjustments to these pricing periods over the periods approved by the Commission in Order No. 2020-315(A). (Tr. Vol. 1, p. 40.26.) Witness Snider explained that the DEC rate design incorporates ten hourly energy pricing periods, while the DEP rate design reflects nine hourly energy pricing periods, including higher-priced periods, called "premium peak hours" in the Companies' Winter and Summer Seasons. (Tr. Vol. 1, p. 40.28.) Witness Snider testified that this rate design appropriately compensates QFs for the avoided energy value they create for customers through the incorporation of granular seasonal and hourly rate periods. (Tr. Vo. 1, p. 40.28.)

On behalf of ORS, Witness Horii testified that the Companies' avoided energy cost calculation methodology conforms with the methodology approved by the Commission in Order No. 2019-881(A). (Tr. Vol. 1, p. 105.6.) Witness Horii acknowledged that the DEC time of use periods for each season vary slightly from the periods approved by the Commission in Order No. 2019-881(A), but found that these changes "reasonably reflect[ ] the updated energy cost profile in DEC's service territory." (Tr. Vol. 1, p. 105.8.) Witness Horii likewise found the time of use periods for DEP to be reasonable and noted that they are identical to the DEP time of use periods approved in Order No. 2019-881(A). In sum, Witness Horii did not recommend any changes to the Companies' avoided energy cost calculations or resulting rates applicable to the Standard Offer Tariffs. (Tr. Vol. 1, p. 105.9.) No other intervenor submitted testimony regarding the Companies' avoided energy calculations and rates. As Witness Snider explained, the Stipulating Parties support Commission approval of the Companies' avoided energy methodology and rates as presented in the Stipulation. (Tr. Vol. 1, p. 44.3.)

On behalf of the Commission's independent third-party consultant, London Economics Witness Goulding testified that the Companies avoided cost methodology, including its avoided energy calculation and rates as agreed to in the Stipulation, "fairly accounts for DEC's and DEP's avoided costs" and advocated that the Commission approve the methodology and avoided energy rates. (Tr. Vol. 2, p. 10.) More specifically, in its Independent Report, London Economics stated that the Companies' "methodology and resulting avoided energy rates are reasonable." (Hrg. Ex. 7, at 36.) The Independent Report noted that London Economics "agrees with the use of production cost modeling, and allocation of avoided costs based on value according to expected periods of peak hours and seasons." (Hrg. Ex. 7, at 36.) In sum, London Economics found that the Companies' avoided energy rates "accurately reflect DEC [sic] and DEP's avoided costs" and recommended that the Commission approve the Companies' avoided energy calculation and resulting rates consistent with the Stipulation. (Hrg. Ex. 7, at 50.)

Commission Conclusions

Act 62 provides that the Commission must ensure that "rates for the purchase of energy and capacity fully and accurately reflect the electrical utility's avoided costs" including the utility's energy costs to be avoided by purchases from QFs. S.C. Code Ann. § 58-41-20(B)(1), (3).

Taking into consideration the evidence presented, the general agreement among the parties and the Report and testimony of the Commission's independent third-party consultant, the Commission finds that the Companies' avoided energy calculation and rate design, as agreed to in the Stipulation, accurately reflects their respective avoided energy costs and that the rates are fair to the Companies' customers and fair and non-discriminatory to QFs. Consistent with this evidence, the Commission specifically finds that the Companies' proposed seasonal and hourly pricing periods are reasonable, consistent with the Commission's findings in Order No. 2019-881(A), and appropriately compensates QFs for the avoided energy value they create for customers.

In addition to meeting the requirements of Act 62, the Commission appreciates that the avoided energy quantification and rate design were accepted by a diverse group of stakeholders. The Commission agrees with London Economics that the participation of organizations representing the public interest, interests of developers, and interest of the utilities suggests that the approach and corresponding rates are balanced. Accordingly, the Commission hereby finds that the avoided energy calculation and rate design, as agreed to in the Stipulation, fully and accurately quantifies DEC's and DEP's forecasted energy cost to be avoided by purchases from QFs and is consistent with the requirements of Act 62 and PURPA.

D. Solar Integration Services Charge

EVIDENCE AND CONCLUSIONS SUPPORTING FINDINGS OF FACT NO. 9

The evidence supporting these findings of fact and conclusions is contained in the Companies' Joint Application, testimony, and exhibits in these Dockets, the Stipulation, and the entire record in this proceeding.

The Companies' Application identified that Commission Order No. 2019-881(A) had approved Solar Integration Services Charges ("SISC") of $1.10/MWh for DEC and $2.39/MWh for DEP based on existing and committed solar capacity in DEP (2,950 MW) and DEC (840 MW) across each utility's respective system at the time the 2018 Solar Ancillary Service Study was completed. The Companies explained that the difference in the DEP and DEC SISC cost is largely driven by the significantly greater amount of existing and committed future solar capacity in DEP compared to DEC. The Companies further explained that the independent technical review of the methodology and inputs of the 2018 Solar Ancillary Service Study was still underway but was not complete at the time of filing the Application. The Companies explained that they were working with parties to the prior 2019 SISC Settlement to propose an amendment to the 2019 SISC Settlement for the Commission's approval, which will provide flexibility regarding the timing of filing the results of the technical review and the updated SISC. Therefore, the Companies proposed to continue charging the SISCs for DEC and DEP approved in 2019 avoided cost proceeding pending completion of the independent technical review and future updates to the SISC.

On July 29, 2021, the parties to the 2019 SISC Settlement filed an amended partial settlement agreement in this proceeding for informational purposes, which, in pertinent part, provided that the current SISCs would continue in effect for avoided cost rates proposed in the current proceeding pending completion of the independent technical review and filing of an updated SISCs with the Commission. The Companies agreed in the amended partial settlement agreement to file the updated SISCs no earlier than February 1, 2022 and no later than August 1, 2022.

ORS witness Horii testified that ORS agreed with Duke's recommendation to hold the SISC at current levels pending completion of the independent technical review. (Tr. Vol. 1, p. 104). London Economics' Report noted the SISCs were proposed to remain unchanged pending completion of independent technical review and that DEC and DEP had committed to file updated SISCs with the Commission on or before August 1, 2022. (Hrg. Ex. 7, at 16.)

Commission Conclusions

The Commission finds that the SISCs supported in the Companies' Application and addressed in the amended 2019 SISC partial settlement agreement continue to be appropriate for purposes of this proceeding, and that DEC and DEP shall continue to charge the SISCs under the same terms approved by Order No. 2019-881(A) until such time as updated SISCs are filed for approval by the Commission. The Companies shall complete the independent technical review ordered by the Commission in Order No. 2019-881(A) and file updated SISCs and any supporting studies on or before August 1, 2022.

E. <u>Standard Offer Documents: Tariffs, PPAs, and Terms and Conditions</u>

EVIDENCE AND CONCLUSIONS SUPPORTING FINDINGS OF FACT NO. 10

The evidence supporting these findings of fact and conclusions is contained in the Companies' Joint Application, testimony, and exhibits in these Dockets, the Stipulation, and the entire record in this proceeding.

The Companies request Commission approval of DEC's and DEP's updated Standard Offer contracting documents, which include the Companies' respective Standard Offer Tariffs, Standard Offer PPAs, and Terms and Conditions. (Tr. Vol. 1, p. 83.7.) As DEC/DEP Witness Johnson explained, these documents memorialize the contractual relationship between the Companies and smaller QFs up to 2 MW selling power to the Companies under the Standard Offer. The Commission most recently approved the Companies' Standard Offer contracting documents in Order No. 2019-881(A), and, as Witness Johnson explained, the Standard Offer contracting documents proffered for Commission approval in this proceeding are largely the same documents approved by the Commission in the 2019 avoided cost proceeding in in Order Nos. 2019-818(A) and 2020-315(A). (Tr. Vol. 1, p. 83.5.)

Standard Offer Tariffs (Schedule PP)

As Witness Johnson described, the Standard Offer Tariff sets forth the Companies' avoided cost rates and contract terms available to Standard Offer QFs desiring to sell energy and capacity to DEC and DEP under PURPA. (Tr. Vol. 1, p. 83.7.) In particular, the Companies' respective

Standard Offer Tariffs state the avoided cost rates and rate structure applicable to the purchase and sets forth other provisions including, but not limited to, the Seller or Administrative Charge, power factor-related charges and adjustments, monthly fees associated with interconnection facilities, and the Solar Integration Services Charge. (Tr. Vol. 1, p. 83.7.) The Companies' Standard Offer Tariffs provide eligible QFs with variable, 5-year, and 10-year fixed-term options. (Tr. Vol. 1, Ex. 2.)

Aside from changes to the proposed avoided cost rates addressed by Witness Glen Snider, Witness Johnson testified that the Companies have included several ministerial corrections to the Standard Offer Tariffs to improve clarity, but have not proposed any substantive changes to the Standard Offer Tariffs. (Tr. Vol. 1, p. 83.9.)

Witness Johnson testified that the Companies' Standard Offer Tariffs comply with the requirements of Act 62 because they address energy, capacity, and ancillary services, among other factors relevant to the purchase of electricity based upon a fair and accurate assessment of DEC's and DEP's future avoided costs. (Tr. Vol. 1, p. 83.8.)

Standard Offer PPA and Standard Offer Terms and Conditions

As Witness Johnson explained, the Standard Offer PPA is the pro forma PPA that DEC and DEP use to contract with smaller QFs eligible for the Standard Offer for the purchase of energy and capacity under PURPA. (Tr. Vol. 1, p. 83.9.) The Terms and Conditions are incorporated into DEC's and DEP's Standard Offer PPA by reference and set forth the contractual obligations of both the QF and the Companies as necessary to administer Schedule PP and the Standard Offer PPA in a fair and consistent manner. (Tr. Vol. 1, p. 83.11.)

Witness Johnson also explained that the Companies have not proposed any substantive modifications to the Standard Offer PPAs and Terms and Conditions in this proceeding. Instead, the only revisions to these documents are the designations in the headers and footers. (Tr. Vol. 1, pp. 83.10, 83.12.) Witness Johnson testified that the Companies' Standard Offer PPAs and Terms and Conditions comply with the requirements of Act 62 because they offer eligible QFs a term duration of ten years and set forth terms that are both consistent with FERC regulations and commercially reasonable. (Tr. Vol. 1, p. 83.10.)

ORS, Intervenor, and London Economics Review

On behalf of ORS, Witness Horii testified that ORS reviewed the Companies' proposed modifications to the Standard Offer Tariffs, Standard Offer PPAs, and Terms and Conditions. Witness Horii found that the "very minimal changes" to the Standard Offer Tariffs were "reasonable and non-discriminatory to QFs" and agreed with Witness Johnson that the proposed revisions to the Standard Offer PPAs and Terms and Conditions" were "predominantly 'housekeeping' changes." (Tr. Vol. 1, p. 105.17.) According to Witness Horii, the proposed modifications to all three sets of documents "remain consistent with or contain slight improvements to those approved by the Commission in Order No. 2019-881(A)." (Tr. Vol. 1, p. 105.17.) For these reasons, Witness Horii stated that ORS does not object to the Companies' proposed changes to the Standard Offer Tariffs, the Standard Offer PPAs, or the Standard Offer Terms and Conditions. Aside from ORS, no other party proffered testimony regarding these documents.

In Stipulation testimony, Witness Johnson explained that the Stipulating Parties agree with the proposed minor revisions and jointly recommend the Commission approve the Standard Offer Tariffs, Standard Offer PPAs, and Terms and Conditions. (Tr. Vol. 1, p. 87.4.)

Representing the Commission's independent third-party consultant, London Economics, Witness Goulding agreed with Witness Johnson's characterization of the Standard Offer Tariffs, Standard Offer PPAs, and Terms and Conditions as documents that are largely unchanged from the ones approved by the Commission in the 2019 avoided cost proceeding. (Tr. Vol. 2, Ex. 7, p. 15.) Describing the limited revisions as "administrative updates," the London Economics Report found the Companies' Standard Offer documents to be "commercially reasonable and consistent with PURPA" and recommended that the Commission approve the documents consistent with its 2019 Orders. (Hrg. Ex. 7, at 39.)

Commission Conclusions

The Commission adopts the Standard Offer Tariffs proposed by the Companies in Johnson Stipulation Exhibit 2 (DEC) and Johnson DEP Exhibit 2 (DEP). (Hrg. Exs. 5, 4.) Likewise, the Commission adopts the Standard Offer PPAs and Terms and Conditions proposed by the Companies in Johnson DEC Exhibits 3 & 4 and Johnson DEP Exhibits 3 & 4.

Act 62 requires DEC and DEP to offer fixed price PPAs to small power producers for the purchase of energy and capacity at avoided cost rates, with "commercially reasonable terms and a duration of ten years" until certain thresholds have been met. S.C. Code Ann. § 58-41-20(F)(1). Similarly, Act 62 mandates that terms and conditions be "commercially reasonable" and consistent with all FERC regulations and orders issued to implement PURPA. S.C. Code Ann. § 58-41-20(B)(2). The Commission is persuaded by the testimony of Witness Johnson on behalf of the Companies, Witness Horii on behalf of ORS, and Witness Goulding on behalf of the Commission's independent third-party consultant London Economics that the Companies' Standard Offer documents are commercially reasonable and consistent with the requirements of PURPA, FERC's implementing regulations, and Act 62. In reaching this decision, the Commission notes, in particular, the very limited modifications to these documents since the 2019 avoided cost proceeding.

F. **Large QF PPA**

EVIDENCE AND CONCLUSIONS SUPPORTING FINDINGS OF FACT NO. 11

The evidence supporting these findings of fact and conclusions is contained in the Companies' Joint Application, testimony, and exhibits in these Dockets, the Stipulation, and the entire record in this proceeding.

As Witness Johnson testified, the Large QF PPA is the standard form PPA that the Companies propose to use to contract with small power producer QFs greater than 2 MW in size and not eligible for the Standard Offer that commit to sell and deliver energy and capacity to the Companies. Witness Johnson explained that Act 62 directs that such PPAs should not be determinative of the avoided cost price and length (or "term") of the power purchase agreement, but requires utilities' form PPAs to contain a variety of commercial terms and conditions, including, but not limited to, provisions addressing force majeure, indemnification, choice of venue, and confidentiality. (Tr. Vol. 1, p. 83.13.) According to Witness Johnson, each of the contractual provisions required by Act 62 are included in the Companies' Large QF PPA. (Tr. Vol. 1, p. 83.14.) Witness Johnson also testified that the Companies' Large QF PPA is commercially reasonable as required by Act 62, and complies with applicable FERC regulations. (Tr. Vol. 1, 83.14.)

Witness Johnson explained that the Companies have made limited modifications to the Large QF PPA to "incorporate certain accommodations that have been requested by QFs engaged in the contracting process using this document over the past 18 months." (Tr. Vol. 1, p. 83.15.) Specifically, the Companies (1) revised the definition of "change of control" to exclude transfers completed in connection with tax equity financing transaction where the seller retains operational control of the QF; (2) modified certain representations and warranties relating to "eligible commercial entity" and "eligible contract participant" to allow QF sellers additional flexibility regarding representations as to the expected commercial operation date, and (3) modified Section 4.3 to extend the Testing Period, allowing the QF Seller additional time to complete testing in the event of a final permitting delay caused by the Companies and not the QF Seller's acts or omissions. (Tr. Vol. 1, pp. 83.15–83.16.) Witness Johnson highlighted two additional minor changes to the Large QF PPA in his Stipulation testimony: (1) to clarify certain actions that a QF Seller may take under the Large QF PPA without triggering a change of control, the Companies further amended the definition of "change of control" in Section 1.13 and added a new Section 1.17 to define a "Permitted Transfer"; and (2) in Section 1.15, the Companies made wording corrections to the terms "upgrade" and "Requested Interconnection Facilities In-Service Date." (Tr. Vol. 1, p. 86.6-7.)

Witness Johnson also noted that the Companies have committed to reviewing the Large QF PPA with stakeholders in conjunction with the implementation of the Companies' new interconnection process known as "queue reform." Witness Johnson stated that the Companies anticipate undertaking this stakeholder review following FERC's ruling on the Companies' queue reform application. (Tr. Vol. 1, p. 83.16.) Witness Johnson also explained that the Companies' "queue reform" application is currently pending at FERC and that upon a determination, the Companies will begin discussing any necessary changes to the Large QF PPA with stakeholders. (Tr. Vol. 1, p. 83.16.)

On behalf of ORS, Witness Horii stated that ORS does not object to the Companies' proposed modifications to the Large QF PPA, (Tr. Vol. 1, p. 105.17), and no other intervenor proffered testimony regarding the Companies' Large QF PPA. As Witness Johnson explained, the Stipulating Parties support the proposed minor revisions to the Large QF PPA and jointly recommend the Commission approve the Large QF PPA. (Tr. Vol. 1, p. 87.4.)

In its Report, London Economics found that the Large QF PPA "remains compliant with the contractual provisions required under Act No. 62" and "continues to be commercially reasonable." (Hrg. Ex. 7, at 42.) In its view, the limited proposed changes to the Large QF PPA "all act to increase flexibility for QFs[,] . . . do not make fulfillment of the contract more onerous on the part of the QFs, and indeed were requested by them, and thus should be approved by the Commission as proposed in the Stipulation." (Hrg. Ex. 7, at 42.)

Commission Conclusions

The Commission adopts the Large QF PPA proposed by the Companies in Johnson Stipulation Exhibit 6. (Hrg. Ex. 5.) Act 62 expressly requires the Commission to review and approve one or more standard form PPAs for use by small power production facilities not eligible for the Standard Offer. S.C. Code Ann. § 58-41-20(A). The Act provides that such form PPAs should not be determinative of the avoided cost price and length (or "term") of the power purchase agreement, but requires utilities' form PPAs to contain certain commercial terms and conditions, including, but not limited to, provisions addressing force majeure, indemnification, choice of venue, and confidentiality. S.C. Code Ann. § 58-41-20(A). Consistent with PURPA, Act 62 also provides utilities and QFs the freedom to enter into PPAs with terms that differ from the Commission-approved form PPA. S.C. Code Ann. § 58-41-20(A) (such PPAs must be filed with the Commission pursuant to S.C. Code Ann. § 58-41-20(D)). Act 62 also generally requires that all PPAs be commercially reasonable and consistent with regulations and orders promulgated by FERC implementing PURPA. S.C. Code Ann. § 58-41-20(B)(2).

The Commission appreciates the efforts of the Company and other stakeholders to reach consensus on modifications to the Large QF PPA. The Commission agrees with Witness Johnson and London Economics that the Companies' proposed Large QF PPA meets each of the contractual requirements, while remaining commercially reasonable and consistent with PURPA and FERC's implementing regulations. The Commission further finds that the Companies and Large QFs may mutually agree to contract using PPAs that contain different terms than those contained in the Large QF PPA adopted by the Commission.

G. Large QF Tariff

EVIDENCE AND CONCLUSIONS SUPPORTING FINDINGS OF FACT NO. 12

The evidence supporting these findings of fact conclusions is contained in the Companies' Joint Application, testimony, and exhibits in these Dockets, the Stipulation, and the entire record in this proceeding.

Witness Johnson explained that Commission Order No. 2020-315(A) directed the Companies to prepare and file a tariff for Large QFs that is similar in structure to the Standard Offer Tariff. (Tr. Vol. 1, p. 82.18.) Consistent with this requirement, Witness Johnson explained that the Companies each developed a Large QF Tariff presenting the current avoided cost rates available to Large QFs and initially filed the Large QF Tariffs with the Commission on May 15, 2020. (Tr. Vol. 1, p. 83.18.) Order No. 2020-315(A) further directed DEC and DEP to "incorporate the most up-to-date inputs to the avoided energy and avoided capacity rates to reflect future changes to Duke's integrated resource plans consistent with DEC's and DEP's most recently-filed IRPs in calculating the avoided cost rates for Large QFs." (Tr. Vol. 1, p. 83.18.) Accordingly, Witness Johnson explained that DEC and DEP have, since the initial May 2020 filing, updated their respective Large QF Tariffs on a quarterly basis through a filing on the Commission's E-tariff system. (Tr. Vol. 1, p. 83.19.) Witness Johnson explained that the Large QF Tariffs filed for approval with the Companies Joint Application includes only minimal, non-substantive revisions to the Large QF Tariffs as filed in May 2020, and that the Large QF Tariffs comply with the Commission's Order Nos. 2019-881(A) and 2020-315(A). (Tr. Vol. 1, p. 83.19.)

Witness Snider testified that the Large QF Tariffs were calculated using the same methodology to calculate avoided energy and avoided capacity rates as the Companies use to calculate the Standard Offer Tariff. (Tr. Vol. 1, p. 40.5.)

On behalf of ORS, Witness Horii stated that ORS does not object to the Companies' proposed modifications to the Large QF Tariffs, (Tr. Vol. 1, p. 105.17), and no other intervenor proffered testimony regarding the Companies' Large QF Tariffs. As Witness Johnson explained, the Stipulating Parties agree with the proposed minor revisions and jointly recommend the Commission approve the Companies' Large QF Tariffs. (Tr. Vol. 1, p. 87.4.) London Economics likewise recommended that the Commission approve the Companies' Large QF Tariffs. (Hrg. Ex. 7, at 50.)

Commission Conclusions

The Commission adopts the Companies' respective Large QF Tariffs presented in Johnson Stipulation Exhibit 4 (DEC) and Johnson DEP Exhibit 6. (Hrg. Exs. 3, 5.) In so holding, the Commission finds that the Large QF Tariffs comply with the requirements of Order No. 2020-315(A) to prepare a tariff applicable to QFs not eligible for the standard offer and to update such tariff on a quarterly basis. The Commission further notes that all parties and the Commission's independent third-party consultant have recommended—through either testimony or as part of the Stipulation—the Commission approve the Large QF Tariffs.

H. Notice of Commitment Form

EVIDENCE AND CONCLUSIONS SUPPORTING FINDINGS OF FACT NO. 13

The evidence supporting these findings of fact conclusions is contained in the Companies' Joint Application, testimony, and exhibits in these Dockets, the Stipulation, and the entire record in this proceeding.

Witness Johnson explained that the Companies' Notice of Commitment Form is a document that small power producer QFs may execute to establish a non-contractual "legally enforceable obligation" to sell output of their QF facility to DEC or DEP. (Tr. Vol. 1, 83.19.) According to Witness Johnson, Act 62 directs the Commission to approve a notice of commitment to sell form whereby a small power producer may commit to sell its output (a) at the avoided cost rates, and (b) pursuant to the PPA terms in effect at the time it submits the form to the utility. (Tr. Vol. 1, p. 83.20.) While Act 62 does not specify each element of the form required to establish the QF's "commitment to sell," it makes clear that the form must provide small QFs a "reasonable period of time" from submittal of the form to execute a PPA with the utility. (Tr. Vol. 1, p. 83.20.) Witness Johnson explained that the Commission approved the Companies' Notice of Commitment Form in the 2019 avoided cost proceeding. (Tr. Vol. 1, p. 83.22.) He noted that the Companies have been using the Notice of Commitment Form approved by the Commission in Order No. 2019-881(A) since that time and have not proposed any substantive modifications to the Form in this proceeding. (Tr. Vol. 1, 83.22.) Rather, Witness Johnson explained that the only change to the Notice of Commitment Form proposed in this proceeding is to remove the option to submit the Form by mail. Witness Johnson noted that all documents are now submitted by email, and the need for this change became especially apparent during the Covid-19 pandemic. (Tr. Vol. 1, p. 83.22.)

Witness Johnson explained that the Companies committed to negotiate in good faith with CCEBA on revisions to the Notice of Commitment Form and, in particular, the standard for establishing a Legally Enforceable Obligation as reflected on the form in light of changes to the South Carolina Generator Interconnection Procedures ("SCGIP") approved by the Commission in Order No. 2021-439 on June 18, 2021. (Tr. Vol. 1, pp. 87.6–87.7.) As part of the Stipulation, the

Companies and CCEBA also agreed to submit proposed revisions to the Notice of Commitment Form to the Commission for approval after FERC approval of the revised SCGIP procedures. (Tr. Vol. 1, p. 87.7.)

Further, Witness Johnson testified that if FERC approves the requested complementary revisions to the Companies' Joint Open Access Transmission Tariff, CCEBA and the Companies agree to submit proposed revisions to the Notice of Commitment Form, jointly or separately, to the Commission for approval no later than two weeks after such approval. (Tr. Vol. 1, p. 87.7.) Witness Johnson clarified in his testimony that the timeframe may be extended by the mutual consent of CCEBA and the Companies. (Tr. Vol. 1, p. 87.7.)

On behalf of ORS, Witness Horii confirmed that ORS does not object to the Companies' proposed Notice of Commitment Form. (Tr. Vol. 1, p. 105.17.) He noted that the proposed language changes are "very minimal," and the form remains "consistent with" the Form approved by the Commission in Order No. 2019-881(A). No other intervenor submitted testimony regarding the Companies' Notice of Commitment Form. As Witness Johnson testified, however, the Stipulating Parties recommend that the Commission approve the Notice of Commitment Form. (Tr. Vol. 1, p. 44.3.)

In its Report, London Economics noted that the "Companies have not proposed any material changes to the NOC form in the current application." (Hrg. Ex. 7, at 17.) Moreover, London Economics found reasonable the new requirement to deliver the form via email rather than physical mail. (Hrg. Ex. 7, at 44.) Given the limited update to the form since the 2019 Commission-approved document, London Economics recommended that the Commission approve the revised Notice of Commitment Form as proposed by the Companies. (Hrg. Ex. 7, at 44.)

Commission Conclusions

Act 62 directs the Commission to "approve a standard notice of commitment to sell form" to be used by small power producer QFs who wish to sell their electric output to an electric utility. S.C. Code Ann. § 58-41-20(D). Although Act 62 gives limited guidance regarding the substance of the Form, it directs that the Notice of Commitment Form shall allow a reasonable period of time form its submittal to execute a power purchase agreement. *Id.* It likewise ensures that small power producer QFs will be guaranteed pricing as of the date the form was submitted. *Id.*

The Commission finds that the Notice of Commitment Form submitted by the Companies meets the requirements of Act 62 and is consistent with PURPA and FERC's implementing regulations. In so finding, the Commission notes that the Companies' Notice of Commitment Form is substantively unchanged from the version approved by the Commission in Order No. 2019-881(A), and further notes the consensus among the parties and the Commission's independent third-party consultant in recommending Commission approval of these documents.

VI. ORDERING PARAGRAPHS

NOW, THEREFORE, IT IS HEREBY ORDERED THAT:

1. Based upon the Joint Application, Stipulation of Agreement, Third-Party Consultant's Report of London Economics, the testimony, and exhibits received into evidence at the hearing and the entire record of these proceedings, the Commission hereby adopts each and every finding of fact enumerated herein. The Commission's conclusions of law are fully stated above.

2. Any motions not expressly ruled upon herein are denied.

3. The avoided capacity and energy costs for DEC approved in this proceeding are:

	Interconnected to Distribution			Interconnected to Transmission		
	Variable Rate	Fixed Long-Term Rate (5 years)	Fixed Long-Term Rate (10 years)	Variable Rate	Fixed Long-Term Rate (5 years)	Fixed Long-Term Rate (10 years)
Energy Credits (¢/kWh)[2]:						
On-peak kWh:						
a. Summer	3.01	3.03	3.20	2.87	2.89	3.06
b. Winter						
1. Morning Hours	3.50	3.42	3.90	3.41	3.33	3.80
2. Evening Hours	3.18	3.34	3.79	3.10	3.25	3.69
c. Premium Peak						
1. Summer	3.01	3.06	3.19	2.90	2.94	3.08
2. Winter	4.78	4.52	4.72	4.63	4.38	4.57
d. Shoulder						
1. Morning/Evening Hours	3.18	3.17	3.21	3.12	3.11	3.15
2. Midday Hours	2.62	2.73	2.76	2.57	2.68	2.71
Off-peak kWh:						
a. Summer	2.16	2.22	2.31	2.12	2.18	2.27
b. Winter	3.08	3.02	3.25	3.02	2.96	3.18
c. Shoulder	2.38	2.25	2.33	2.35	2.22	2.30
Capacity Credits (¢/kWh)[3]:						
On-peak kWh:						
a. Summer	0.00	0.30	0.93	0.00	0.30	0.90
b. Winter	0.00	2.37	7.21	0.00	2.30	7.02

4. The avoided capacity and energy costs for DEP approved in this proceeding are:

	Interconnected to Distribution			Interconnected to Transmission		
	Variable Rate	Fixed Long-Term Rate (5 years)	Fixed Long-Term Rate (10 years)	Variable Rate	Fixed Long-Term Rate (5 years)	Fixed Long-Term Rate (10 years)
Energy Credits (¢/kWh)[2]:						
On-peak kWh:						
a. Summer	2.94	2.96	3.00	2.86	2.88	2.92
b. Winter						
1. Morning Hours	3.75	3.61	3.92	3.68	3.54	3.84
2. Evening Hours	3.65	3.76	4.27	3.57	3.68	4.18
c. Premium Peak						
1. Summer	3.30	3.16	3.22	3.21	3.07	3.12
2. Winter	5.19	4.82	5.12	5.04	4.68	4.98
d. Shoulder	3.03	3.04	3.04	2.99	3.00	3.00
Off-peak kWh:						
a. Summer	2.68	2.75	2.83	2.64	2.71	2.78
b. Winter	3.05	3.18	3.49	3.00	3.13	3.44
c. Shoulder	2.62	2.58	2.61	2.59	2.55	2.58
Capacity Credits (¢/kWh)[3]:						
On-peak kWh:						
a. Winter	0.00	7.58	10.29	0.00	7.43	10.08

5. Within 15 days of the date of this Order, DEC and DEP shall each file final Standard Offer Tariffs, Standard Offer PPAs, and Standard Offer Terms and Conditions, form contract power purchase agreements for Large QFs, Large QF Tariffs and Notice of Commitment to Sell Forms consistent with the requirements of this Order.

6. The Standard Offer Tariffs shall become effective April 22, 2021, and shall remain in effect until the date that the Companies next file updated avoided cost rates with the Commission.

7. The Large QF Tariffs shall become effective April 22, 2021, and the Companies shall update their inputs for both avoided energy and avoided capacity costs on a quarterly basis

based upon each Company's most current integrated resource planning assumptions and forecasts when calculating avoided energy and capacity cost rates available to Large QFs and file updated Large QF Tariffs with the Commission via the Commission's e-tariff system.

8. DEC and DEP shall file the results of the Solar Integration Services Charge independent technical review as well as updated Solar Integration Services Charges on or before August 1, 2022.

BY ORDER OF THE COMMISSION:

____
Justin T. Williams, Chairman

ATTEST:

____
Jocelyn Boyd, Chief Clerk/Executive Director